

Fifth Grade Science Guide

First Nine Weeks

Embedded Inquiry

SPI 0507.Inq.1 Select an investigation that could be used to answer a specific question.

Embedded Technology & Engineering

SPI 0507.T/E.1 Select a tool, technology, or invention that was used to solve a human problem.

SPI 0507.T/E.2 Recognize the connection between a scientific advance and the development of a new tool or technology.

Life Science

Standard 1 – Cells

SPI 0507.1.1 Identify the major parts of plant and animal cells such as, the nucleus, cell membrane, cell wall, and cytoplasm.

SPI 0507.1.2 Compare and contrast basic structures and functions of plant and animal cells.

Standard 2 - Interdependence

SPI 0507.2.1 Describe the different types of nutritional relationships that exist among organisms.

SPI 0507.2.2 Distinguish among symbiotic, commensal, and parasitic relationships.

SPI 0507.2.3 Use information about the impact of human actions or natural disasters on the environment to support a simple hypothesis, make a prediction, or draw a conclusion.

Standard 3 - Flow of Matter and Energy

SPI 0507.3.1 Identify photosynthesis as the food manufacturing process in plants.

SPI 0507.3.2 Compare how plants and animals obtain energy.

Standard 4 – Heredity

- SPI 0507.4.1 Recognize that information is passed from parent to offspring during reproduction.
- SPI 0507.4.2 Distinguish between inherited traits and those that can be attributed to the environment.

Standard 5 - Biodiversity and Change

- SPI 0507.5.1 Identify physical and behavioral adaptations that enable animals such as, amphibians, reptiles, birds, fish, and mammals to survive in a particular environment.
- SPI 0507.5.2 Explain how fossils provide information about the past.

Fifth Grade Science Guide

Second Nine Weeks

Embedded Inquiry

SPI 0507.Inq.1 Select an investigation that could be used to answer a specific question.

Embedded Technology & Engineering

SPI 0507.T/E.1 Select a tool, technology, or invention that was used to solve a human problem.

SPI 0507.T/E.2 Recognize the connection between a scientific advance and the development of a new tool or technology.

Earth and Space Science

Standard 6 - The Universe

SPI 0507.6.1 Distinguish among the planets according to their known characteristics such as appearance, location, composition, and apparent motion.

SPI 0507.6.2 Select information from a complex data representation to draw conclusions about the planets.

SPI 0507.6.3 Identify methods and tools for identifying star patterns.

Standard 7 – The Earth

SPI 0507.7.1 Describe internal forces such as volcanoes, earthquakes, faulting, and plate movements that are responsible for the earth's major geological features such as mountains, valleys, etc.

Standard 8 - The Atmosphere

SPI 0507.8.1 Describe the effects of the oceans on weather and climate.

SPI 0507.8.2 Explain how mountains affect weather and climate.

Fifth Grade Science Guide

Third Nine Weeks

Embedded Inquiry

SPI 0507.Inq.1 Select an investigation that could be used to answer a specific question.

Embedded Technology & Engineering

SPI 0507.T/E.1 Select a tool, technology, or invention that was used to solve a human problem.

SPI 0507.T/E.2 Recognize the connection between a scientific advance and the development of a new tool or technology.

Physical Science

Standard 9 – Matter

SPI 0507.9.1 Distinguish between physical and chemical properties.

SPI 0507.9.2 Describe the differences among freezing, melting, and evaporation.

SPI 0507.9.3 Describe factors that influence the rate at which different types of material freeze, melt, or evaporate.

Standard 10 – Energy

SPI 0507.10.1 Differentiate between potential and kinetic energy.

SPI 0507.10.2 Use data from an investigation to determine the method by which heat energy is transferred from one object or material to another.

Standard 11 – Motion

SPI 0507.11.1 Explain the relationship that exist among mass, force, and distance traveled.

Standard 12 - Forces in Nature

SPI 0507.12.1 Recognize that the earth attracts objects without touching them.

SPI 0507.12.2 Identify the force that causes objects to fall to the earth.

SPI 0507.12.3 Use data to determine how shape affects the rate at which a material falls to earth.